

Application No. 09/593,118

**REMARKS**

In the Office Action of November 17, 2004,<sup>1</sup> claims 1-15 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter; claims 1-4, 13, 16-19, 28, 31-34, 43, 46-49, 58, and 61-64 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,064,731 to *Flockhart et al.* ("*Flockhart*") in view of the *Bank Marketing International* article entitled "Are your customers profitable?" ("*Bank Marketing*"); and claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59-61 and 70 were rejected under 35 U.S.C. § 103(a) as unpatentable over *Flockhart* in view of *Bank Marketing* and further in view of U.S. Patent No. 6,411,936 to *Sanders* ("*Sanders*"). Claims 1-70 remain pending in this application, and Applicants address the rejections below.

**Rejection of claims 1-15 under 35 U.S.C. § 101**

The Examiner alleges that claims 1-15 are non-statutory because "no computer hardware or software embodied on a tangible medium are in the body of the claim" (Office Action "OA" at 3-4). The Examiner avers that "[m]ere ideas in the abstract . . . that do not apply, involve, use, or advance the technological arts . . . are . . . non-statutory subject matter" (OA at 3).

Applicants traverse the Examiner's rejection of claims 1-15. To begin with, claims 1-15 are not abstract ideas. The inquiry of whether a claim is statutory focuses on "the essential characteristics of the subject matter, in particular, its practical utility." *State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1375. According to the Federal Circuit, if a claim includes recitations that produce "a concrete, tangible and useful result," the claim is not abstract and has practical utility. See *State Street*, 149 F.3d at 1373, *AT&T Corp. v. Excel*

---

<sup>1</sup> The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

Application No. 09/593,118

*Communications, Inc.*, 172 F.3d 1352, 1358. If the claim is not abstract and has practical utility it is statutory under 35 U.S.C. § 101. Applicants also call attention to M.P.E.P. § 2106(II)(A), which states:

Office personnel have the burden to establish a *prima facie* case that the claimed invention as a whole is directed to solely an abstract idea or to manipulation of abstract ideas or does not produce a useful result. Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101.

The Office Action fails to establish a *prima facie* showing that claims 1-15 are directed to abstract ideas. The Examiner's broad statements regarding abstract ideas and allegation that "no computer hardware or software embodied on a tangible medium are in the body of the claim" do not by themselves establish that the claims are directed to abstract ideas. Indeed, Applicants submit that claims 1-15 are drawn to a useful, concrete, and tangible result, and are therefore not abstract but, rather, statutory under 35 U.S.C. § 101.

Further, claims 1-15 are within the technological arts. Contrary to the Examiner position, whether or not a process claim recites "computer hardware or software embodied on a tangible medium" is not dispositive of determining whether the claimed process is statutory. In fact, the Federal Circuit indicated that arguing that process claims are not patentable subject matter because they lack physical limitations "reflects a misunderstanding of...[the] case law." *AT&T*, F.3d at 1359. In addition, Applicants point out that the presumption that the law "requires all steps of a statutory 'process' to be physical acts applied to physical things" is an "erroneous idea." *In re Musgrave*, 167 U.S.P.Q. 280, 289 (CCPA 1970). The court noted that "it was a misconception to assume that 'all processes, to be patentable, must operate physically upon substances.'" *Id.* at 289.

Application No. 09/593,118

Accordingly, the Examiner's allegation that the claims are not within the technological arts because they do not recite "computer hardware or software embodied on a tangible medium" is not supported. Claims 1-15 are indeed within the useful or "technological" arts, regardless of whether they specifically recite "computer hardware or software embodied on a tangible medium." The impropriety of the Examiner's purported basis for rejection notwithstanding, claim 1 recites, *inter alia*, a method "performed by a processing system . . ." and, at least by virtue of that recitation, claim 1 is within the technological arts.

According to the Examiner (OA at 3):

mere recitation in the preamble . . . or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breath life and meaning into the preamble.

Applicants disagree with the Examiner. Applicants point out that the Examiner provides no authority, beyond conjecture, supporting the above statements. Applicants further call attention to the provisions of M.P.E.P. § 2111.02, which make clear that:

If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is 'necessary to give life, meaning, and vitality' to the claim, then the claim preamble should be construed as if in the balance of the claim (internal citations omitted).

and:

If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction (internal citations omitted).

In this case, the recitation of a method "performed by a processing system" does not merely state a purpose or intended use of the claimed invention. Instead, when read in the

Application No. 09/593,118

context of the claim as whole, that recitation specifies the manner in which the claimed method is performed and gives meaning to the claim. For at least these reasons, the "processing system" recitation of claim 1 "should be construed as if in the balance of the claim." See M.P.E.P. § 2111.02. So construed, that recitation clearly places the claimed invention within the technological arts.

Claim 1 and its dependent claims 2-15 are clearly within the technological arts and are not directed to mere abstract ideas. Claims 1-15 therefore define statutory subject matter and the rejection under 35 U.S.C. § 101 should be withdrawn.

**Rejection under 35 U.S.C. § 103(a) based on *Flockhart* and *Bank Marketing***

*I. The rejection is ambiguous*

The rejection of claims 1-4, 13, 16-19, 28, 31-34, 43, 46-49, 58, and 61-64 is ambiguous and improper. The Examiner states: "[c]laims 1-4, 13, 16-19, 28, 31-34, 43, 46-49, 58, and 61-64 are rejected under 35 U.S.C. § 103(a) as being unpatentable over . . . [Flockhart and Bank Marketing]" (OA at 4). The substance of the rejection, however, does not address claim 61. The Examiner addresses claim 61 in a separate § 103(a) rejection based on *Flockhart*, *Bank Marketing*, and *Sanders* (OA at 15-16). In addition, the substance of the rejection based on *Flockhart* and *Bank Marketing* includes allegations with respect to claims 65-69 (OA at 10, 11), which are not included in the statement of rejection. Accordingly, it is unclear how the Examiner is applying *Flockhart* and *Bank Marketing* to claim 61, and the Office Action does not articulate a statutory basis for the rejection of claims 65-69.

To be fully responsive, Applicants address claim 61 and the Examiner's allegations with respect to claims 65-69 in the remarks that follow. Applicants also address claim 61 below in the remarks presented in response to the § 103(a) rejection based on *Flockhart*, *Bank Marketing*, and *Sanders*. Should the Examiner continue to dispute the patentability of the pending claims,

Application No. 09/593,118

Applicants request that the Examiner provide in the next Office Action an appropriate statutory basis for the rejection of claims 65-69 and also clarification as to which references are being used to reject claim 61. *See M.P.E.P. § 707.07.*

***II. A case for *prima facie* obviousness has not been established***

Applicants traverse the rejection of claims 1-4, 13, 16-19, 28, 31-34, 43, 46-49, 58, and 61-64 because a case for *prima facie* obviousness has not been established. To establish *prima facie* obviousness under 35 U.S.C. § 103(a), three requirements must be met. First, the applied references, taken alone or in combination, must teach or suggest each and every element recited in the claims. *See M.P.E.P. § 2143.03* (8th ed. 2001). Second, there must be some suggestion or motivation, either in the reference(s) or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the reference(s) in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of these requirements must “be found in the prior art, and not be based on applicant’s disclosure.” *M.P.E.P. § 2143* (8th ed. 2001).

Claim 1 recites a combination of steps including:

generating a hazard function for an existing customer, to determine probability of churn, based on . . . [a] hazard function model and account data associated with the customer and corresponding to the attributes . . . and

calculating a gain in lifetime value for the customer based on a change in the hazard function resulting from a retention effort.

Contrary to the Examiner’s position, *Flockhart* does not teach or suggest the “generating” feature of claim 1 noted above. *Flockhart* is directed to improving retention of call center customers. The Examiner notes *Flockhart*’s disclosure of determining if a party to a call is designated as an “at risk” customer in a database (col. 3, lines 32-38; OA at 4-5). Neither this disclosure in

Application No. 09/593,118

*Flockhart* relied upon by the Examiner, nor any other disclosure in *Flockhart*, teaches or suggests the claimed “generating.”

According to *Flockhart*, an “at risk” customers are those customers “who have received poor service or are otherwise dissatisfied” (col. 1, lines 20-22). Determining if a party is an “at risk” customer, as disclosed by *Flockhart*, does not teach or suggest “generating a hazard function for an existing customer, to determine probability of churn, based on . . . [a] hazard function model and account data associated with the customer and corresponding to the attributes,” as recited in claim 1. Even if *Flockhart*’s “at risk” classification were to suggest a propensity of churn, *Flockhart* does not teach or suggest generating a hazard function to determine probability of churn, let alone generating a hazard function based on a hazard function model and account data associated with the customer and corresponding to attributes relating to a plurality of current customer accounts, as claimed.

The Examiner alleges that *Flockhart*’s “‘at risk’ customer function represents the hazard function model and the customer account number represents the attribute” (OA at 4). Applicants disagree. *Flockhart*’s “at risk” function includes a series of operations for determining whether a call party is classified as an “at risk” customer and providing “special treatment” for “at risk” customers (col. 3, lines 5-52; FIG. 2). The determination of whether a call party is “at risk” is based on a comparison of an identifier, which could be an account number, against contents of a database (col. 3, lines 30-39). *Flockhart*’s “at risk” function does not constitute a hazard function model based on attributes relating to a plurality of current customer accounts, as recited in claim 1. Moreover, *Flockhart*’s account numbers do not serve as a basis for generating a hazard function model, as recited in claim 1. Instead, the account numbers merely serve as identifiers that are compared against a database.

Application No. 09/593,118

In addition, *Flockhart* does not teach or suggest “calculating a gain in lifetime value for the customer based on a change in the hazard function resulting from a retention effort.” In fact, the Examiner concedes that *Flockhart* fails to disclose the claimed “calculating” (OA at 5).

*Bank Marketing* fails to cure *Flockhart*’s deficiencies. Although *Bank Marketing* discloses predicting “the length of time a customer is likely to stay with [a bank],” it does not teach or suggest “generating a hazard function for an existing customer . . . based on . . . [a] hazard function model and account data associated with the customer and corresponding to the attributes,” as recited in claim 1.

*Bank Marketing* also fails to teach or suggest “calculating a gain in lifetime value for the customer based on a change in the hazard function resulting from a retention effort,” as recited in claim 1. Although *Bank Marketing* describes “looking at estimated customer lifetime value (LTV)” to “decide whether to keep and develop a [customer],” it does not teach or suggest “calculating a gain in lifetime value for the customer based on a change in the hazard function resulting from a retention effort,” as claimed (page 4, ¶¶ 3-6). The Examiner alleges that *Bank Marketing* discloses “changing to a focus based on retention in order to look at estimated lifetime value” and determining “the frequency of customer defection and likelihood of switching . . . prior to calculating the lifetime value (OA at 5). Even if this statement by the Examiner were valid, it does not support the allegation that the *Bank Marketing* discloses that claimed “calculating.” Determining the frequency of defection and likelihood of switching prior to calculating LTV does not constitute “calculating a gain in lifetime value for the customer based on a change in the hazard function resulting from a retention effort,” as claimed.

Application No. 09/593,118

Accordingly, neither *Flockhart* nor *Bank Marketing*, nor any combination thereof, teaches or suggests each and every feature of claim 1. As such, *prima facie* obviousness has not been established.

Moreover, *prima facie* obviousness has not been established at least because the requisite motivation to combine *Flockhart* and *Bank Marketing* is lacking. Determinations of obviousness must be supported by evidence on the record. See *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (finding that the factual determinations central to the issue of patentability, including conclusions of obviousness by the Board, must be supported by “substantial evidence”). Further, the desire to combine references must be proved with “substantial evidence” that is a result of a “thorough and searching” factual inquiry. *In re Lee*, 277 F.3d 1338, 1343-1344 (Fed. Cir. 2002) (quoting *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52).

In this case, the Office Action does not show that a skilled artisan considering *Flockhart* and *Bank Marketing*, and not having the benefit of Applicants’ disclosure, would have been motivated to combine the references in a manner resulting in Applicants’ claimed combination. The Examiner merely provides descriptions of how *Flockhart* and *Bank Marketing* allegedly teach certain features without a proper motive for combining those references. The Examiner alleged that a skilled artisan would have combined the references “to calculate a gain in lifetime value for the customer based on a change in the hazard function resulting from a retention effort with the motivation of determining the customers likelihood of switching during the time the customer is committed to the business” (OA at 6). This allegation in the Office Action is not properly supported and does not show that a skilled artisan would have combined the references as alleged. For example, the Examiner does not show the alleged motivation to be present in the applied references or in the knowledge available to a skilled artisan. Further, that combining the

Application No. 09/593,118

references might allow for “determining the customers likelihood of switching during the time the customer is committed to the business” does not show that a skilled artisan would have combined the references as alleged.

Applicants call attention to M.P.E.P. § 2143.01, which makes clear that: “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination” (citations omitted). The Office Action does not show that the cited art “suggests the desirability” of the alleged combination. Applicants submit that the conclusions in the Office Action were not reached based on facts gleaned from the cited references but that, instead, teachings of the present application were improperly used in hindsight to reconstruct the prior art.

For at least the foregoing reasons, *prima facie* obviousness has not been established with respect to claim 1 and the rejection of that claim under 35 U.S.C. § 103(a) should be withdrawn.

Independent claim 16 recites a combination including:

a generating module for generating a hazard function for an existing customer, to determine probability of churn, based on the hazard function model and account data associated with the customer and corresponding to the attributes . . . [and]

a calculating module for calculating a gain in lifetime value for the customer based on a change in the hazard function resulting from a retention effort.

Although claim 16 is of different scope than claim 1, the § 103(a) rejection of claim 16 should be withdrawn for at least reasons similar to those presented above in connection with claim 1.

Each of independent claim 31 and 46 recites, in part:

generating a hazard function for an existing customer, to determine probability of churn, based on the hazard function model and account data associated with the customer and corresponding to the attributes . . . and

Application No. 09/593,118

calculating a gain in lifetime value for the customer based on a change in the hazard function.

Although claims 31 and 46 are of different scope than claim 1, the rejection of claims 31 and 46 under 35 U.S.C. § 103(a) should be withdrawn for at least the reasons presented above in connection with claim 1.

Independent claim 61 recites, *inter alia*, a method, performed by a multilayer feed-forward neural network, including “calculating, for the customer, a gain in lifetime value based on a change in the hazard function resulting from a retention effort.” *Bank Marketing* fails to teach or suggest at least the above features. For at least reasons similar to those presented above in connection with claim 1, neither *Flockhart* nor *Bank Marketing* teaches or suggests the “calculating” recited in claim 61. Furthermore, neither *Flockhart* nor *Bank Marketing* teaches or suggests the claimed “multilayer feed-forward neural network.” The applied references, taken alone or in combination, therefore fail to teach or suggest each and every element recited in claim 61. Moreover, the requisite motivation for combining *Flockhart* and *Bank Marketing* is lacking, as explained above. For at least these reasons, *prima facie* obviousness has not been established based on *Flockhart* and *Bank Marketing* and the § 103(a) rejection of claim 61 should be withdrawn.

Independent claim 63 recites a combination including:

identifying a temporal-based retention effort based on the hazard function for each of the plurality of customers . . . and

calculating, for each of the plurality of customers, an expected gain in value from the identified retention effort.

The Examiner alleges that *Flockhart* discloses the claimed “identifying” because it discloses “special treatment” for “at risk” customers (OA at 9). The Examiner also notes *Flockhart*’s disclosure of “maintaining customer satisfaction with customer service focus on agent training

Application No. 09/593,118

... in an attempt to maintain high standards of service" (col. 1, lines 26-28; OA at 9).

Applicants disagree with the Examiner's interpretation of *Flockhart*. Although *Flockhart* mentions providing special treatment, such as giving a call high priority, does not teach or suggest "identifying a temporal-based retention effort based on the hazard function for each of the plurality of customers," as claimed. Even if, for the sake of argument, "special treatment" were construed as a "temporal-based retention effort," *Flockhart* does not disclose that the special treatment is identified based on a hazard function as claimed. *Flockhart* merely mentions that special treatment can be "any desired treatment" (col. 3, lines 40-41). Further, *Flockhart*'s disclosure regarding maintaining customer satisfaction and high standards of service do not teach or suggest "identifying a temporal-based retention effort based on the hazard function for each of the plurality of customers," as claimed. For at least these reasons, *Flockhart* fails to teach or suggest the claimed "identifying."

As affirmed by the Examiner, *Flockhart* further fails to disclose "calculating, for each of the plurality of customers, an expected gain in value from the identified retention effort," as recited in claim 63 (OA at 9).

*Bank Marketing* does not cure *Flockhart*'s deficiencies. Although *Bank Marketing* discloses offering lower prices, bundling services, and dropping charges, the reference does not teach or suggest "identifying a temporal-based retention effort based on the hazard function for each of the plurality of customers," as recited in claim 63. *Bank Marketing* also fails to teach or suggest "calculating, for each of the plurality of customers, an expected gain in value from the identified retention effort," as claimed. As explained, *Bank Marketing* merely describes "looking at estimated customer lifetime value (LTV)" to "decide whether to keep and develop a [customer]." Further, determining the frequency of defection and likelihood of switching prior

Application No. 09/593,118

to calculating LTV does not constitute "calculating, for each of the plurality of customers, an expected gain in value from the identified retention effort," as claimed.

Accordingly, the applied references, taken alone or in combination, fail to teach or suggest each and every element recited in claim 63. In addition, the requisite motivation for combining *Flockhart* nor *Bank Marketing* is lacking, for at least the reasons explained above in connection with claim 1. For at least these reasons, *prima facie* obviousness has not been established and the rejection of claim 63 under 35 U.S.C. § 103(a) should be withdrawn.

For at least the foregoing reasons, the rejection of independent claims 1, 16, 31, 46, 61, and 63 under 35 U.S.C. § 103(a) should be withdrawn. The § 103(a) rejection of claims 2-4, 13, 17-19, 28, 32-34, 43, 47-49, 58 and 62-69 should be withdrawn as well, at least because of the respective dependence of those claims upon base claims 1, 16, 31, 46, 61, and 63. Applicants thus request withdrawal of the § 103(a) rejection and the timely allowance of claims 1-4, 13, 16-19, 28, 31-34, 43, 46-49, 58, and 61-69.

**Rejection under 35 U.S.C. § 103(a) based on *Flockhart*, *Bank Marketing* and *Sanders***

Applicants traverse the rejection of claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59-61 and 70 because *prima facie* obviousness has not been established with respect to these claims.

Claims 5-12, 14 and 15 depend upon base claim 1; claims 20-27, 29 and 30 depend upon base claim 16; claims 35-42, 44, and 45 depend from base claim 31; and claims 50-57, 59 and 60 depend upon base claim 46. As explained above, *prima facie* obviousness has not been established with respect to claims 1, 16, 31 and 46 based on *Flockhart* and *Bank Marketing*. A case for *prima facie* obviousness has therefore not been established with respect to dependent claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59 and 60 based on those references. In particular, *Flockhart* and *Bank Marketing*, taken alone or in combination, fail to teach or suggest

Application No. 09/593,118

each and every element recited in claims 1, 16, 31 and 46, and required by dependent claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59 and 60.

*Sanders* does not cure the deficiencies of *Flockhart* and *Bank Marketing*. *Sanders* is directed to “enterprise value enhancement” within the context of knowledge management (Abstract; col. 1, lines 5-10; col. 2, lines 57-60). Although *Sanders* describes financial analyses and value enhancement solutions, *Sanders* does not teach or suggest at least “calculating a gain in lifetime value for the customer based on a change in the hazard function resulting from a retention effort,” as recited in claim 1. Likewise, *Sanders* fails to teach or suggest at least the “calculating module” recited in claim 16 and the “calculating” subject matter recited in claims 31 and 46.

Moreover, with regard to claims 1, 16, 31 and 46, *Sanders* fails to teach or suggest at least “generating a hazard function for an existing customer, to determine probability of churn, based on . . . [a] hazard function model and account data associated with the customer and corresponding to the attributes,” as claimed. Accordingly, neither *Flockhart*, *Bank Marketing*, *Sanders*, nor any combination thereof, teaches or suggests all of the features recited in claims 1, 16, 31 and 46 and required by dependent claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59 and 60. For at least this reason, *prima facie* obviousness has not been established with respect to claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59 and 60.

Moreover, for at least the reasons presented above in connection with claim 1, the requisite motivation to combine *Flockhart*, *Bank Marketing* and *Sanders* is lacking. For at least this additional reason, *prima facie* obviousness has not been established. Because *prima facie* obviousness has not been established, the § 103(a) rejection of claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59 and 60 should be withdrawn.

Application No. 09/593,118

Independent claim 61 recites a method, performed by a multilayer feed-forward neural network, including “calculating, for the customer, a gain in lifetime value based on a change in the hazard function resulting from a retention effort.” As explained above, neither *Flockhart* nor *Bank Marketing* teaches or suggests the “calculating” recited in claim 61. Furthermore, as explained, *Sanders* does not cure the deficiencies of *Flockhart* and *Bank Marketing*. The applied references, taken alone or in combination, therefore fail to teach or suggest each and every element recited in claim 61. Moreover, the requisite motivation for combining *Flockhart*, *Bank Marketing*, and *Sanders* is lacking, for at least the reasons set forth above. For at least these reasons, *prima facie* obviousness has not been established.

The requisite motivation to combine the applied references is also lacking. The requisite motivation is lacking for at least the reasons presented above in connection with claim 1. Further, the Examiner’s additional allegations set forth with respect to claim 61 do not show that a skilled artisan considering *Flockhart*, *Bank Marketing* and *Sanders*, and not having the benefit of Applicants’ disclosure, would have been motivated to combine the references in a manner resulting in Applicants’ claimed combination. The Examiner alleges that a skilled artisan would have combined *Sanders* with the alleged *Flockhart-Bank Marketing* combination “to incorporate a multiplayer feed-forward neural network with the motivation of utilizing this type of intelligence to determine the possibility of churn” (OA at 17). This allegation in the Office Action is not properly supported and does not establish the required motivation to combine the references. The Examiner does not show that the references suggest the desirability of “utilizing [a multiplayer feed-forward neural network] to determine the possibility of churn,” as alleged. The Examiner also fails to show that the alleged motivation is present in the knowledge generally available to a skilled artisan. In addition, the Examiner fails to provide any

Application No. 09/593,118

explanation as to why a skilled artisan would have been motivated to utilize a multiplayer feed-forward neural network to determine the possibility of churn, other than to attempt meet the terms of claim 61. Applicants submit that the conclusions in the Office Action relating to motivation were not reached based on facts gleaned from the cited references and that, instead, teachings of the present application were improperly used in hindsight to reconstruct the prior art.

For at least the foregoing reasons, *prima facie* obviousness has not been established and the § 103(a) rejection of claim 61 should be withdrawn. The rejection of claim 70 should be withdrawn as well, at least because that claim depends upon claim 61.

Applicants request withdrawal of the rejection of claims 5-12, 14, 15, 20-27, 29, 30, 35-42, 44, 45, 50-57, 59-61 and 70 under 35 U.S.C. § 103(a) and the timely allowance of these claims.

**Conclusion**

The claimed invention is neither anticipated nor rendered obvious in view of the references cited against this application. Applicants request the Examiner's reconsideration of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 07-2347.

Respectfully submitted,

Dated: March 16, 2005

By:

Joel Wall  
Reg. No. 25,648